

Amendments to the claims:

Please amend the claims as indicated below. Added text is underlined and deleted text is either struck through or shown in double enclosing brackets. Applicant avers that no new matter has been added.

1  
2 1. (Currently amended) In a network, a method of processing received e-mail messages comprising:

3 a) identifying origin-identifying information about an origin of a  
4 received e-mail message, the origin-identifying information based on data  
5 from at least one item of data in the received e-mail message or at least  
6 one item of data used to send the received e-mail message, the origin-  
7 identifying information including at least one of the following:

8 i) an actual sender of the received e-mail message;

9 ii) a final ~~[[IP]]~~Internet Protocol address;

10 iii) a final domain name;

11 iv) a normalized reverse ~~[[DNS]]~~Domain Name Service  
12 lookup of the final ~~[[IP]]~~Internet Protocol address; or

13 v) an ~~[[IP]]~~ Internet Protocol path used to ~~[[send]]~~route  
14 the received e-mail message;

15 b) categorizing whether the received e-mail message is solicited  
16 or unsolicited ~~e-mail~~ by using statistics based on the information about  
17 the origin of the received e-mail message; and

18 c) processing the received e-mail message based on its  
19 categorization.

1 2. (Currently amended) The method of claim 1 wherein the actual sender  
2 is identified by combining at least two of the following ~~pieces of identifying~~  
3 ~~information~~:

- 4 a) an e-mail address used by an apparent sender;
- 5 b) a display name used by the apparent sender;
- 6 c) the final ~~[[IP]]~~Internet Protocol address ~~used by the sender~~;
- 7 d) the final domain name ~~used by the sender~~; e) the  
8 normalized reverse ~~[[DNS]]~~Domain Name Service lookup of the final  
9 ~~[[IP]]~~Internet Protocol address;
- 10 f) a ~~mail from~~ MAIL FROM address of the received e-mail  
11 message;
- 12 g) a domain name used by the apparent sender;
- 13 h) a name of client software used by the apparent sender;
- 14 i) user-agent;
- 15 j) timezone;
- 16 k) source ~~[[IP]]~~Internet Protocol address;
- 17 l) ~~sendmail~~ version of Sendmail® used by an initial first  
18 receiver;
- 19 m) the ~~[[IP]]~~Internet Protocol path used to route the received e-  
20 mail message; n) a range of ~~[[IP]]~~Internet Protocol addresses;
- 21 o) owner data stored in databases; or
- 22 p) a normalized ~~mail from~~ MAIL FROM address of the received  
23 e-mail message.

1 3. (Currently amended) The method of claim 1 further comprising using  
2 statistics compiled at at least one database to categorize whether the  
3 received e-mail message is solicited or ~~unsolicited e-mail~~.

1 4. (Currently amended) The method of claim 3 further comprising  
2 computing a score indicating a likelihood that the received e-mail message  
3 is ~~unsolicited e-mail~~ using the statistics compiled at the at least one  
4 database.

1 5. (Currently amended) The method of claim 3 further comprising sending  
2 information about received e-mail messages to the at least one database,  
3 the sent information including at least two of the following:

4 a) information identifying the actual sender;

5 b) whether the actual sender is included on a recipient's  
6 whitelist;

7 c) whether the actual sender is included on a recipient's  
8 blacklist;

9 d) information identifying the final [[IP]]Internet Protocol  
10 address;

11 e) whether the final [[IP]]Internet Protocol address is included  
12 on the recipient's whitelist;

13 f) whether the final [[IP]]Internet Protocol address is included  
14 on the recipient's blacklist;

15 g) information identifying the final domain name;

16 h) whether the final domain name is included on the recipient's  
17 whitelist;

18 i) whether the final domain name is included on the recipient's  
19 blacklist;

20 j) information identifying the normalized reverse  
21 [[DNS]]Domain Name Service lookup of the final [[IP]]Internet Protocol  
22 address;

23 k) whether the normalized reverse [[DNS]]Domain Name  
24 Service lookup of the final [[IP]]Internet Protocol address is included on  
25 the recipient's whitelist;

26 l) whether the normalized reverse [[DNS]]Domain Name  
27 Service lookup of the final [[IP]]Internet Protocol address is included on  
28 the recipient's blacklist;

29 m) information identifying the [[IP]]Internet Protocol path;

30 n) whether the [[IP]]Internet Protocol path is included on the  
31 recipient's whitelist;

32 o) whether the [[IP]]Internet Protocol path is included on the  
33 recipient's blacklist;

34           p)       whether the received e-mail message could be categorized  
35 locally; or  
36           q)       whether a recipient changed a whitelist[[/]] or blacklist status  
37 of the received e-mail message.

1   6. (Currently amended) The method of claim 3 further comprising  
2 requesting the at least one database to send a ~~recipient~~ statistics to a  
3 recipient about the origin-identifying information.

1 7. (Currently amended) The method of claim 3 further comprising storing  
2 origin-identifying information from received e-mail messages including at  
3 least one of the following:

4 a) a total number of e-mail messages sent;

5 b) a number of e-mail messages sent over a first predetermined  
6 time period;

7 c) a total number of e-mail messages sent to recipients in ~~[[a]]~~  
8 the network who have included the origin on a recipient's whitelist;

9 d) a number of e-mail messages sent to recipients in the  
10 network who have included the origin on the recipient's whitelist over a  
11 second predetermined time period;

12 e) a number of recipients who have included the origin on the  
13 recipient's whitelist;

14 f) a total number of times a recipient changed ~~[[the]]~~an origin's  
15 whitelist~~[[/]]~~ or blacklist status;

16 g) a number of times ~~[[a]]~~the recipient changed the origin's  
17 whitelist~~[[/]]~~ or blacklist status over a third predetermined time period;

18 h) a total number of e-mail messages sent to recipients in the  
19 network who have not included the origin on the recipient's whitelist;

20 i) a number of e-mail messages sent to recipients in the  
21 network who have not included the origin on the recipient's whitelist over  
22 a fourth predetermined time period;

23 j) a total number of unique recipients in the network who have  
24 received at least one e-mail message from the origin;

25 k) a total number of e-mail messages sent to unique recipients  
26 in ~~[[a]]~~the network who have included the origin on ~~[[a]]~~the recipient's  
27 whitelist; or

28 l) a total number of e-mail messages sent to unique recipients  
29 in the network who have not included the origin on the recipient's  
30 whitelist.

1 8. (Currently amended) The method of claim 3 wherein compiling  
2 statistics includes at least one of the following:

3 a) determining a ratio of a first number of e-mail messages sent  
4 ~~[[by]]~~ from the origin to recipients in the network who have included the  
5 origin on ~~[[the]]~~ a recipient's whitelist in a predetermined time period  
6 divided by a second number of e-mail messages sent ~~[[by]]~~ from the origin  
7 to recipients in the network in the predetermined time period;

8 b) determining a ratio of a first number of recipients in the  
9 network who have included the origin on the recipient's whitelist divided  
10 by a second number of unique recipients in the network who received e-  
11 mail~~[[s]]~~ messages from the origin in the predetermined time period;

12 c) determining a ratio of a first number of times in a  
13 predetermined time interval ~~a message from~~ the origin of an e-mail  
14 message was moved from ~~[[a]]~~ the recipient's whitelist to a recipient's  
15 blacklist divided by a second number of times ~~a message from~~ the origin of  
16 the e-mail message was moved from ~~[[a]]~~ the recipient's blacklist to ~~[[a]]~~ the  
17 recipient's whitelist;

18 d) determining a ratio of a first number of times in a  
19 predetermined time interval ~~a message from~~ the origin of an e-mail  
20 message was moved from ~~[[a]]~~ the recipient's blacklist to ~~[[a]]~~ the recipient's  
21 whitelist divided by a second number of times ~~a message from~~ the origin of  
22 the e-mail message was moved from ~~[[a]]~~ the recipient's blacklist to ~~[[a]]~~ the  
23 recipient's whitelist;

24 e) determining a ratio of a first number of unique users within  
25 the network who whitelisted the origin within a predetermined time  
26 period compared to a second number of unique users within the network  
27 who blacklisted the origin within the predetermined time period;

28 f) determining a ratio reflecting whether the origin sends a  
29 majority of e-mail messages to recipients who have included the origin on  
30 the recipient's whitelist;

31 g) determining a ratio reflecting a first number of wanted e-  
32 mail messages sent by the origin compared to a second number of  
33 unwanted or total e-mail messages sent by the origin;

34           h)       determining a difference between a first number of expected  
35 e-mail messages sent by the origin and a second number of unexpected e-  
36 mail messages sent by the origin;  
37           i)       determining a difference between a first number of times a  
38 user whitelisted ~~a message from~~ the origin of an e-mail message and a  
39 second number of times a user blacklisted ~~a message from~~ the origin of the  
40 e-mail message;  
41           j)       determining a difference reflecting whether the origin sends  
42 a majority of e-mail messages to known recipients;  
43           k)       converting any of the above ratios or differences to a score  
44 indicating ~~[[the]]~~ a likelihood the received e-mail message is unsolicited-e-  
45 ~~mail~~; or  
46           l)       applying the score to ~~[[the]]~~ appropriate e-mail messages in  
47 ~~[[the]]~~ a spam folder.

1   9. (Currently amended) The method of claim 3 further comprising setting  
2 a predetermined threshold for accepting received e-mail messages based  
3 on statistics associated with the origin-identifying information.

1 10. (Currently amended) A computer-readable storage medium having  
2 instructions which, when read, cause a computer to perform a method of  
3 processing received e-mail messages comprising:

4 a) identifying origin-identifying information about an origin of a  
5 received e-mail message, the origin-identifying information based on data  
6 from at least one item of data in the received e-mail message or at least  
7 one item of data used to send the received e-mail message, the origin-  
8 identifying information including at least one of the following:

9 i) an actual sender of the received e-mail message;

10 ii) a final [[IP]]Internet Protocol address;

11 iii) a final domain name;

12 iv) a normalized reverse [[DNS]]Domain Name Service  
13 lookup of the final [[IP]]Internet Protocol address; or

14 v) an [[IP]] Internet Protocol path used to [[send]]route  
15 the received e-mail message;

16 b) categorizing whether the received e-mail message is solicited  
17 or unsolicited ~~e-mail~~ by using statistics based on information about the  
18 origin of the received e-mail message; and

19 c) processing the received e-mail message based on its  
20 categorization.



1 11. (Currently amended) The computer-readable storage medium of claim  
2 10 wherein the method identifies the actual sender is identified by  
3 combining at least two of the following pieces of identifying information:

- 4 a) an e-mail address used by an apparent sender;
- 5 b) a display name used by the apparent sender;
- 6 c) the final [[IP]]Internet Protocol address ~~used by the sender;~~
- 7 d) the final domain name ~~used by the sender;~~
- 8 e) the normalized reverse [[DNS]]Domain Name Service lookup  
9 of the final [[IP]]Internet Protocol address;
- 10 f) a ~~mail from~~ MAIL FROM address of the received e-mail  
11 message;
- 12 g) a domain name used by the apparent sender;
- 13 h) a name of client software used by the apparent sender;
- 14 i) user-agent;
- 15 j) timezone;
- 16 k) source [[IP]]Internet Protocol address;
- 17 l) ~~sendmail~~ version of Sendmail® used by an initial first  
18 receiver;
- 19 m) the [[IP]]Internet Protocol path used to route the received e-  
20 mail message;
- 21 n) a range of [[IP]]Internet Protocol addresses;
- 22 o) owner data stored in databases; or
- 23 p) a normalized ~~mail from~~ MAIL FROM address of the received  
24 e-mail message.

1 12. (Currently amended) The computer-readable storage medium of claim  
2 10 wherein the method further compris[[ing]]es using statistics compiled  
3 at at least one database to categorize whether the received e-mail message  
4 is unsolicited e-mail.

1 13. (Currently amended) The computer-readable storage medium of claim  
2 12, wherein the method further compris[[ing]]es using the statistics  
3 compiled at the at least one database to compute a score indicating a  
4 likelihood that the received e-mail message is solicited or unsolicited-e-  
5 mail.

1 14. (Currently amended) The computer-readable storage medium of claim  
2 12, wherein the method further compris[[ing]]es sending information  
3 about received e-mail messages to the at least one database, the  
4 information including at least two of the following:

5 a) information identifying the actual sender;

6 b) whether the actual sender is included on a recipient's  
7 whitelist;

8 c) whether the actual sender is included on a recipient's  
9 blacklist;

10 d) information identifying the final [[IP]]Internet Protocol  
11 address;

12 e) whether the final [[IP]]Internet Protocol address is included  
13 on the recipient's whitelist;

14 f) whether the final [[IP]]Internet Protocol address is included  
15 on the recipient's blacklist;

16 g) information identifying the final domain name;

17 h) whether the final domain name is included on the recipient's  
18 whitelist;

19 i) whether the final domain name is included on the recipient's  
20 blacklist;

21 j) information identifying the normalized reverse  
22 [[DNS]]Domain Name Service lookup of the final [[IP]] Internet Protocol  
23 address;

24 k) whether the normalized reverse [[DNS]]Domain Name  
25 Service lookup of the final Internet Protocol[[IP]]address is included on  
26 the recipient's whitelist;

27 l) whether the normalized reverse[[DNS]]Domain Name  
28 Service lookup of the final [[IP]]Internet Protocol address is included on  
29 the recipient's blacklist;

30 m) information identifying the [[IP]]Internet Protocol path;

31 n) whether the [[IP]]Internet Protocol path is included on the  
32 recipient's whitelist;

33           o)       whether the~~[[IP]]~~Internet Protocol path is included on the  
34 recipient's blacklist;  
35           p)       whether the received e-mail message could be categorized  
36 locally; or  
37           q)       whether a recipient changed a whitelist~~[[/]]~~or blacklist status  
38 of the received e-mail message.

1   15. (Currently amended) The computer-readable storage medium of claim  
2 12, the method further comprising requesting the at least one database to  
3 send ~~a recipient~~ statistics to a recipient about the origin-identifying  
4 information.

1 16. (Currently amended) The computer-readable storage medium of claim  
2 12[[,]] wherein the method further compris[[ing]]es storing the origin-  
3 identifying information from received e-mail messages including at least  
4 one of the following:

5 a) a total number of e-mail messages sent;

6 b) a number of e-mail messages sent over a first predetermined  
7 time period;

8 c) a total number of e-mail messages sent to recipients in a  
9 network who have included the origin on a recipient's whitelist;

10 d) a number of e-mail messages sent to recipients in the  
11 network who have included the origin on the recipient's whitelist over a  
12 second predetermined time period;

13 e) a number of recipients who have included the origin on the  
14 recipient's whitelist;

15 f) a total number of times a recipient changed [[the]]an origin's  
16 whitelist[[/]] or blacklist status;

17 g) a number of times [[a]]the recipient changed the origin's  
18 whitelist[[/]] or blacklist status over a third predetermined time period;

19 h) a total number of e-mail messages sent to recipients in the  
20 network who have not included the origin on the recipient's whitelist;

21 i) a number of e-mail messages sent to recipients in the  
22 network who have not included the origin on the recipient's whitelist over  
23 a fourth predetermined time period;

24 j) a total number of unique recipients in the network who have  
25 received at least one e-mail message from the origin;

26 k) a total number of e-mail messages sent to unique recipients  
27 in [[a]]the network who have included the origin on [[a]]the recipient's  
28 whitelist; or

29 l) a total number of e-mail messages sent to unique recipients  
30 in the network who have not included the origin on the recipient's  
31 whitelist.

1 17. (Currently amended) The computer-readable storage medium of claim  
2 12 wherein compiling statistics includes at least one of the following:

3 a) determining a ratio of a first number of e-mail messages sent  
4 by the origin to recipients in ~~[[the]]~~a network who have included the origin  
5 on ~~[[the]]~~a recipient's whitelist in a predetermined time period divided by  
6 a second number of e-mail messages sent by the origin to recipients in the  
7 network in the predetermined time period;

8 b) determining a ratio of a first number of recipients in the  
9 network who have included the origin on the recipient's whitelist divided  
10 by a second number of unique recipients in the network who received e-  
11 mail messages from the origin in the predetermined time period;

12 c) determining a ratio of a first number of times in a  
13 predetermined time interval ~~a message from~~ the origin of an e-mail  
14 message was moved from ~~[[a]]~~the recipient's whitelist to a recipient's  
15 blacklist divided by a second number of times ~~a message from~~ the origin of  
16 an e-mail message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the  
17 recipient's whitelist;

18 d) determining a ratio of a first number of times in a  
19 predetermined time interval ~~a message from~~ the origin of an e-mail  
20 message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the recipient's  
21 whitelist divided by a second number of times ~~a message from~~ the origin of  
22 the e-mail message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the  
23 recipient's whitelist;

24 e) determining a ratio of a first number of unique users within  
25 the network who whitelisted the origin within a predetermined time  
26 period compared to a second number of unique users within the network  
27 who blacklisted the origin within the predetermined time period;

28 f) determining a ratio reflecting whether the origin sends a  
29 majority of e-mail messages to recipients who have included the origin on  
30 the recipient's whitelist;

31 g) determining a ratio reflecting a first number of wanted e-  
32 mail messages sent by the origin compared to a second number of  
33 unwanted or total e-mail messages sent by the origin;

- 34           h)       determining a difference between a first number of expected  
35 e-mail messages sent by the origin and a second number of unexpected e-  
36 mail messages sent by the origin;
- 37           i)       determining a difference between a first number of times a  
38 user whitelisted ~~a message from~~ the origin of an e-mail message and a  
39 second number of times a user blacklisted ~~a message from~~ the origin of the  
40 e-mail message;
- 41           j)       determining a difference reflecting whether the origin sends  
42 a majority of e-mail messages to known recipients;
- 43           k)       converting any of the above ratios or differences to a score  
44 indicating ~~a the likelihood the~~ received e-mail message is unsolicited-e-  
45 ~~mail~~; or
- 46           l)       applying the score to ~~[[the]]~~appropriate e-mail messages in  
47 ~~[[the]]~~a spam folder.

1   18. (Currently amended) The computer-readable storage medium of claim  
2   12, the method further comprising setting a predetermined threshold for  
3   accepting received e-mail messages based on statistics associated with the  
4   origin-identifying information.

1 19. (Currently amended) In a network, a method for categorizing received  
2 e-mail messages, the method comprising:

3 a) collecting origin-identifying information about an origin of a  
4 received [[an]] e-mail message, the origin-identifying information  
5 including at least one of the following:

6 i) an actual sender of the received e-mail message;

7 ii) a final [[IP]]Internet Protocol address;

8 iii) a final domain name;

9 iv) a normalized reverse [[DNS]]Domain Name Service  
10 lookup of the final [[IP]]Internet Protocol address; or

11 v) an [[IP]] Internet Protocol path used to [[send]]route  
12 the received e-mail message; and

13 b) compiling statistics at at least one database about the origin  
14 based on the origin-identifying information, wherein the statistics are  
15 used to categorize whether the received e-mail message is solicited or  
16 unsolicited.



1 20. (Currently amended) The method of claim 19 wherein the actual  
2 sender is identified by combining at least two of the following ~~pieces of~~  
3 ~~identifying information:~~

- 4 a) an e-mail address used by an apparent sender;
- 5 b) a display name used by the apparent sender;
- 6 c) the final ~~[[IP]]Internet Protocol address used by the sender;~~
- 7 d) the final domain name ~~used by the sender;~~
- 8 e) the normalized reverse~~[[DNS]]Domain Name Service~~ lookup  
9 of the final ~~[[IP]]Internet Protocol~~ address;
- 10 f) a ~~mail from~~ MAIL FROM address of the received e-mail  
11 message;
- 12 g) a domain name used by the apparent sender;
- 13 h) a name of client software used by the apparent sender;
- 14 i) user-agent;
- 15 j) timezone;
- 16 k) source~~[[IP]]Internet Protocol~~ address;
- 17 l) ~~sendmail~~version of Sendmail@ used by an initial first  
18 receiver;
- 19 m) the ~~[[IP]]Internet Protocol~~ path used to route the received e-  
20 mail message;
- 21 n) a range of ~~[[IP]]Internet Protocol~~ addresses;
- 22 o) owner data stored in databases; or
- 23 p) a normalized mail from address of the received e-mail  
24 message.

1 21. (Currently amended) The method of claim 19 further comprising using  
2 statistics compiled at the at least one database to compute a score  
3 indicating a likelihood that the received e-mail message is solicited or  
4 ~~unsolicited e-mail.~~

22. (Currently amended) The method of claim 19 further comprising  
sending information about received e-mail messages to the at least one  
database, the information including at least two of the following:

- a) information identifying the actual sender;
- b) whether the actual sender is included on a recipient's  
whitelist;
- c) whether the actual sender is included on a recipient's  
blacklist;
- d) information identifying the final [[IP]]Internet Protocol  
address;
- e) whether the final [[IP]]Internet Protocol address is included  
on the recipient's whitelist;
- f) whether the final [[IP]]Internet Protocol address is included  
on the recipient's blacklist;
- g) information identifying the final domain name;
- h) whether the final domain name is included on the recipient's  
whitelist;
- i) whether the final domain name is included on the recipient's  
blacklist;
- j) information identifying the normalized reverse  
[[DNS]]Domain Name Service lookup of the final [[IP]]Internet Protocol  
address;
- k) whether the normalized reverse [[DNS]]Domain Name  
Service lookup of the final [[IP]]Internet Protocol address is included on  
the recipient's whitelist;
- l) whether the normalized reverse [[DNS]]Domain Name  
Service lookup of the final [[IP]]Internet Protocol address is included on  
the recipient's blacklist;
- m) information identifying the [[IP]]Internet Protocol path;
- n) whether the [[IP]]Internet Protocol path is included on the  
recipient's whitelist;
- o) whether the [[IP]]Internet Protocol path is included on the  
recipient's blacklist;

34           p)       whether the received e-mail message could be categorized  
35 locally; or  
36           q)       whether a recipient changed a whitelist ~~[[/]]~~ or blacklist status  
37 of the received e-mail message.

1   23. (Currently amended) The method of claim 19 further comprising  
2 requesting the at least one database to send ~~a recipient~~ statistics to a  
3 recipient about origin-identifying information.

1 24. (Currently amended) The method of claim 19 further comprising  
2 storing origin-identifying information about received e-mail messages  
3 including at least one of the following:

4 a) a total number of e-mail messages sent;

5 b) a number of e-mail messages sent over a first predetermined  
6 time period;

7 c) a total number of e-mail messages sent to recipients in  
8 ~~[[a]]the~~ network who have included the origin on a recipient's whitelist;

9 d) a number of e-mail messages sent to recipients in the  
10 network who have included the origin on the recipient's whitelist over a  
11 second predetermined time period;

12 e) a number of recipients who have included the origin on the  
13 recipient's whitelist;

14 f) a total number of times a recipient changed ~~[[the]]an~~ origin's  
15 whitelist~~[[/]]~~ or blacklist status;

16 g) a number of times ~~[[a]]the~~ recipient changed the origin's  
17 whitelist~~[[/]]~~ or blacklist status over a third predetermined time period;

18 h) a total number of e-mail messages sent to recipients in the  
19 network who have not included the origin on the recipient's whitelist;

20 i) a number of e-mail messages sent to recipients in the  
21 network who have not included the origin on the recipient's whitelist over  
22 a fourth predetermined time period;

23 j) a total number of unique recipients in the network who have  
24 received at least one e-mail message from the origin;

25 k) a total number of e-mail messages sent to unique recipients  
26 in ~~[[a]]the~~ network who have included the origin on ~~[[a]]the~~ recipient's  
27 whitelist; or

28 l) a total number of e-mail messages sent to unique recipients  
29 in the network who have not included the origin on the recipient's  
30 whitelist.

1 25. (Currently amended) The method of claim 19 wherein compiling the  
2 statistics includes at least one of the following:

3 a) determining a ratio of a first number of e-mail messages sent  
4 by the origin to recipients in the network who have included the origin on  
5 ~~[[the]]~~a recipient's whitelist in a predetermined time period divided by a  
6 second number of e-mail messages sent by the origin to recipients in the  
7 network in the predetermined time period;

8 b) determining a ratio of a first number of recipients in the  
9 network who have included the origin on the recipient's whitelist divided  
10 by a second number of unique recipients in the network who received e-  
11 mail~~[[s]]~~ messages from the origin in the predetermined time period;

12 c) determining a ratio of a first number of times in a  
13 predetermined time interval ~~a message from~~ the origin of an e-mail  
14 message was moved from ~~[[a]]~~the recipient's whitelist to a recipient's  
15 blacklist divided by a second number of times ~~a message from~~ the origin of  
16 the e-mail message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the  
17 recipient's whitelist;

18 d) determining a ratio of a first number of times in a  
19 predetermined time interval ~~a message from~~ the origin of an e-mail  
20 message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the recipient's  
21 whitelist divided by a second number of times ~~a message from~~ the origin of  
22 the e-mail message was moved from ~~[[a]]~~the recipient's blacklist to ~~[[a]]~~the  
23 recipient's whitelist;

24 e) determining a ratio of a first number of unique users within  
25 the network who whitelisted the origin within a predetermined time  
26 period compared to a second number of unique users within the network  
27 who blacklisted the origin within the predetermined time period;

28 f) determining a ratio reflecting whether the origin sends a  
29 majority of e-mail messages to recipients who have included the origin on  
30 the recipient's whitelist;

31           g)       determining a ratio reflecting a first number of wanted e-  
32 mail messages sent by the origin compared to a second number of  
33 unwanted or total e-mail messages sent by the origin;  
34           h)       determining a difference between a first number of expected  
35 e-mail messages sent by the origin and a second number of unexpected e-  
36 mail messages sent by the origin;  
37           i)       determining a difference between a first number of times a  
38 user whitelisted ~~a message from~~ the origin of an e-mail message and a  
39 second number of times a user blacklisted ~~a message from~~ the origin of the  
40 e-mail message;  
41           j)       determining a difference reflecting whether the origin sends  
42 a majority of e-mail messages to known recipients;  
43           k)       converting any of the above ratios or differences to a score  
44 indicating a ~~the~~ likelihood the received e-mail message is unsolicited-e-  
45 mail; or  
46           l)       applying the score to ~~[[the]]~~ appropriate e-mail messages in  
47 ~~[[the]]~~ a spam folder.

1   26. (Currently amended) The method of claim 19 further comprising  
2   setting a predetermined threshold for accepting received e-mail messages  
3   based on the statistics associated with origin-identifying information.